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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-------------|----------------------|-------------------------|------------------|
| 09/914,458 | 02/11/2002 | Oskar Wack | 99/07049 W0US 5328 | |
| 7590 01/12/2004 | | | EXAMINER | |
| Robert W Becker & Associates | | | WEBB, GREGORY E | |
| Suite B 707 Highway 66 East | | ART UNIT | PAPER NUMBER | |
| Tijeras, NM 8 | | | 1751 | |
| | | | DATE MAILED: 01/12/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | |
|---|--|-----------------------|--------------|----------|--|--|--|--|
| Office Action Summary | | 09/914,458 | WACK, OSKAR | Δ | | | | |
| | | Examiner | Art Unit | | | | | |
| | | Gregory E. Webb | 1751 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE | | | | | | | | |
| Status / | esponsive to communication(s) filed on $\frac{\sqrt{0}}{2}$ | 0/2003 | | | | | | |
| | esponsive to communication(s) filed on | 1 | | | | | | |
| ~ ` | is action is FINAL . 2b) This a | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4)[X] Cla | Sition of Claims Z5-67 Claim(s) is/are pending in the application. | | | | | | | |
| - • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| , | | | | | | | | |
| 6) 风 Cla | 5) Claim(s)is/are allowed. 6) Claim(s) 25-6 is/are rejected. | | | | | | | |
| 7)∏ Cla | aim(s) is/are objected to. | | | | | | | |
| 8)∏ Cla | aim(s) are subject to restriction and/or | election requirement. | | | | | | |
| Application Papers | | | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ☑ None of: 1. ☑ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) □ The translation of the foreign language provisional application has been received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. | | | | | | | | |
| Attachment(s) | | | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | | | | | | | | |

DETAILED ACTION

Response to Amendment

- 1. The following is in response to the applicant's amendments and remarks filed 10/6/03.
- 2. The applicant has amended the methods claims to further specify the specific use of two glycol ethers used to form an emulsion cleaning fluid. The applicant has also amended the composition claims to include a first and second glycol ether in a two-phase composition.
- 3. The applicant states the following arguments:
- 4. 1) The prior art fails to teach "a solution of water and a first and second glycol ether."
- 5. 2) The prior art fails to teach "a solution of water, propylene glycol ether and glycol ether acetate."
- 6. 3) VanEenam specifically teaches away from the use of propylene glycol monomethyl ether acetate.
- 7. Prior to reviewing the references, it should be noted that many of the applicant's claims do not require the inclusion on a glycol ether acetate. Specifically, claims 25-31, 33-35, 37, 48-56, 59, 61 do not require a glycol ether acetate and thus arguments 2 and 3 do not apply to these claims. Thus for these claims, the applicant's sole applicable argument is argument #1.
- 8. Concerning the first and second argument and the Kuemin reference, on page 5 Kuemin teaches the use of the solvent ethyl-3-ethoxy-propionate, a well-known glycol ether acetate. On page 11, Kuemin states the following:

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The mist preferred organic solvents are propylene glycolim in on-butyl ether ("PnB"), propylene glycolimono isobutyl ether ("PiB"), propylene glycolimono tertiary butyl ether ("PtB"), propylene glycolimono n-propyl ether ("PnP"), dipropylene glycolimono n-butyl ether ("DPnB"), dipropylene glycolimono n-propyl ether ("DPnP") or dipropylene glycolimono dimethyl ether ("DMM"). Table III lists some features of these preferred organic solvents.

- 9.
- 10. Concerning the first and second argument and the Shiino reference, Shiino teaches the following:
 - "(2) As described in the above, the preferable cleaning agent composition comprises:
 - (3) A) 100 parts by weight of <u>at least one member</u> selected from the group consisting of propylene glycol monoalkyl ether having an alkyl group containing from 4 to 6 carbon atoms and dipropylene glycol monoalkyl ether having an alkyl group containing from 3 to 6 carbon atoms,
 - (4) B) from 40 to 200 parts by weight of at least one member selected from the group consisting of methanol, ethanol, 1-propanol and 2-propanol, and
 - (5) C) from 1 to 200 parts by weight of water. "
- 11.
- 12. From this statement it is clear that Shiino intends for at least on glycol ether in the composition, thus a combination of one or more glycol ethers is possible. Thus applicant's argument 1 clearly does not apply to this reference.
- 13. Concerning the VanEenam reference, the examiner agrees with argument #3. However, argument #3 does not apply to any of the claims at hand as none of the instant claims require the glycol ether to be "propylene glycol monomethyl ether acetate." In fact, in claim 59, the only claim to mention this compound, allows the second glycol ether to be selected from numerous glycol ethers including many taught by VanEenam.
- 14. Concerning the Dishart reference, the applicant has not argued the applicability of this reference. Thus previous rejections stand.

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Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 60-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

17. The applicant states in claim 60, "wherein one of the first and second glycol ethers is a

glycol ether acetate." It is unclear to the examiner if the applicant intends for both glycol ethers

to be glycol ether acetates or only one of the two glycol ethers is a glycol ether acetate. It is

unclear as the verb tense does not match the plural subject (i.e. wherein x and y is z, versus the

proper form: wherein x and y are z).

18. Similarly the tense of the verb in claim 61 does not match the plural subject rendering the

claim indefinite.

Claim Objections

19. Claims 25-69 are objected to because of the following informalities: The applicant is

using improper chemical nomenclature in the claims to describe the specific chemicals. The

applicant has in most of the claims decided to hyphenate all the chemical terms. It is not only

unclear to the examiner why this would be done, but would further frustrate the public by not

being able to search properly for these compounds. It is suggested that the applicant remove

these hyphens and present the chemical using traditional nomenclature. For example in claim

34, the applicant should write the first compound in the Markush group as "propylene glycol

monobutyl ether" or "propylene glycol mono butyl ether." Appropriate correction is required.

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Claim Rejections - 35 USC § 102

- 20. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 21. Claims 25-69 are rejected under 35 U.S.C. 102(b) as being antipated by Misselyn-et-al-(US 5,604,195).
- 22. "Misselyn teaches the following compositions (see col. 4):
 - (22) In one aspect, the invention generally provides a stable, clear all-purpose, hard surface cleaning composition especially effective in the removal of oily and greasy oil, which is in the form of a substantially dilute oil-in-water microemulsion having an aqueous phase and an oil phase; The dilute o/w microemulsion includes, approximately on a weight basis:
 - (23) from 1.0% to 20% by weight of an anionic surfactant;
 - (24) from 3.0% to 10% by weight of a nonionic surfactant
 - (25) from 0.1% to 50% of a water-mixable cosurfactant having either limited ability or substantially no ability to dissolve oily or greasy soil;
 - (26) from 0.1% to 10% of a grease release agent, which is a polyethylene glycol or polyvinyl pyrrolidone either of which is complexed with said anionic surfactant;
 - (27) 0 to 15% of magnesium sulfate heptahydrate;
 - (28) 0.4 to 10.0% of a perfume or water insoluble hydrocarbon; and
 - (29) the balance being water, said proportions being based upon the total weight of the composition, wherein the concentration of the anionic surfactant always exceeds the concentration of the nonionic surfactant in the composition and the composition does not contain any anionic polymer, cationic polymer, octanol, cationic disinfectant and/or benzalkonium chloride. "

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24. Concerning the glycol ethers, the glycol ether esters and their respective weight percetages, Misselyn teaches the following (see col. 11):

"(59) Representative members of the polypropylene glycol include dipropylene glycol and polypropylene glycol having a molecular weight of 200 to 1000, e.g., polypropylene glycol 400. Other satisfactory glycol ethers are ethylene glycol monobutyl ether (butyl cellosolve), diethylene glycol monobutyl ether (butyl carbitol), triethylene glycol monobutyl ether, mono, di, tri propylene glycol monobutyl ether, tetraethylene glycol monobutyl ether, mono, di, tripropylene glycol monomethyl ether, propylene glycol monomethyl ether, ethylene glycol monohexyl ether, diethylene glycol monohexyl ether, propylene glycol tertiary butyl ether, ethylene glycol monoethyl ether, ethylene glycol monomethyl ether, ethylene glycol monopropyl ether, ethylene glycol monopentyl ether, diethylene glycol monomethyl ether, diethylene glycol monoethyl ether, diethylene glycol monopropyl ether, diethylene glycol monopentyl ether, triethylene glycol monomethyl ether, triethylene glycol monoethyl ether, triethylene glycol monopropyl ether, triethylene glycol monopentyl ether, triethylene glycol monohexyl ether, mono, di, tripropylene glycol monoethyl ether, mono, di tripropylene glycol monopropyl ether, mono, di, tripropylene glycol monopentyl ether, mono, di, tripropylene glycol monohexyl ether, mono, di, tributylene glycol mono methyl ether, mono, di, tributylene glycol monoethyl ether, mono, di, tributylene glycol monopropyl ether, mono, di, tributylene glycol monobutyl ether, mono, di, tributylene glycol monopentyl ether and mono, di, tributylene glycol monohexyl ether, ethylene glycol monoacetate and dipropylene glycol propionate. When these glycol type cosurfactants are at a concentartion of about 1.0 to about 14 weight %, more preferably about 2.0 weight % to about 10 weight % in combination with a water insoluble hydrocarbon at a concentration of at least 0.5 weight %, more preferably 1.5 weight % one can form a microemulsion composition."

- 25. Concerning the method, Misselyn teaches various methods of cleaning, substrates for cleaning and soils (see examples in cols. 22-25).
- 26. Claims 25-69 are rejected under 35 U.S.C. 102(b) as being antipated by Momoda et al (US 5,610,132).
- 27. Momoda teaches the following composition (see abstract):
 - " A cleaning agent comprising a mixture of a propylene glycol alkyl ether compatible with water any ratio, a propylene glycol alkyl ether compatible with water only at ratios of 50% by volume or less, and water, for example, the mixture having such a composition that each of 15% by volume or more of dipropylene glycol monomethyl ether, 10% by volume or more of dipropylene glycol monopropyl ether, and 15% by volume or more of water is uniformly dissolved in the other two components. This cleaning agent has high detergency on oily matter, has a characteristic that it is easy to separate the oily matter because the oily matter is not dissolved in the cleaning agent, and is

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low toxic."

28. Momoda teaches the following suitable glycol ethers (see col. 6):

- 29. Concerning the methods of use, Momoda teaches the following (see col. 5):
 - "(14) This cleaning method can be carried out by contacting matter to be cleaned with the cleaning agent of this invention. As this contact method, there can, representatively, be mentioned a method of immersing the matter to be cleaned in the cleaning agent or a method of showering or spraying the cleaning agent on the matter to be cleaned. It is effective, at this time, to combine a means such as ultrasonic cleaning, vibration or stirring."

30.

- 31. Claims 25-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Leys (US 5,346,640).
- 32. Leys teaches a composition containing the following (see col. 4):

"A first specie cleaner composition is used to remove graffiti from coated or non-porous surfaces, such as, for example, baked or high gloss enamel, polished or glazed surfaces, masonry, namely, cement and concrete, brick, tile and the like; stone and polished stone; metals including aluminum and steel; smooth or polished wood. This general graffiti composition includes N-methylpyrrolidone in an amount between about 32 to about 40 percent, propylene carbonate in an amount between about 15 to about 25 percent, dipropylene glycol methyl ether acetate or dipropylene glycol monomethyl ether acetate in an amount between about 15 to about 25 percent and isocetyl alcohol in an amount between about 15 to about 25 percent."

- 33. Leys teaches a variety of suitable glycol ethers and glycol ether acetates and also teaches equivalence of these various compounds as follows: (see cols. 6-7):
 - "(9) A glycol material is the third active ingredient. The glycol material is also a solvent. The glycol material should be selected from the aliphatic ether ester family. The preferred glycol, which has a generic name glycol ether ester, is dipropylene glycol methyl ether acetate or dipropylene glycol monomethyl ether acetate. (Ether instead of ether acetate can be used, however ether evaporates at room temperature too quickly to be efficient and makes the surface coat brittle)." (emphasis added)
- 34. Concerning the water content of the composition, Leys teaches the dilution of their composition with water as follows (see col. 15):
 - (65) All of the cleaner compositions are water soluble, have a pale yellow

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appearance and a somewhat fruity fragrance. Moreover, each cleaner composition is non-flammable. Due to the cleaner compositions' water solubility, all of the cleaner compositions except vinyl can also be rinsed or washed off with water to simultaneously neutralize the cleaner compositions. In the vinyl cleaner composition, water neutralizes the solvent part of the composition and leaves the oil part of the composition, as a film, on the vinyl surface to protect the vinyl surface.

- 35. Claims 25-29, 33, 37-42, 49-50, 52-54, 57, 60, 62-65, and 68 are rejected under 35
- U.S.C. 102(b) as being anticipated by VanEenam (US 5,346,640).
- 36. VanEenam is relied upon as stated in the previous action. Concerning the newly added claim limitations, VanEenam teaches various suitable solvents including glycol ethers and glycol

ether acetates (see cols. 3-4):

The principal classes of organic solvents from which useful organic solvents may be selected include esters, alchohols, ketones, aldehydes, ethers and nitriles. These will generally contain one or more of the desired similar or dissimilar functional groups listed above. Examples of organic solvents containing similar functional groups from among those listed above include diethyl gluterate (2 ester groups), phenacyl acetone (2 keto groups), diethylethylene diphosphonate (2 phosphonate ester groups). ethylenedipropionate (2 ester groups), decylene glycol (2 hydroxyl groups), m-dimethoxybenzene (2 ether groups), adiponitrile (2 nitrile groups), ethylene glycol dibutyl ether (2 ether groups), and diethyl-o-phthalate (2 ester groups). Among organic solvents containing dissimilar functional groups from among those listed above may be mentioned 2-phenoxyethanol (hydroxy, ether groups), 1-phenoxy-2-propanol(hydroxy, ether groups), N-phenylmorpholine(amino, ether groups), isopropylacetoacetate (keto, ester groups), o-methoxybenzyl alcohol (ether, hydroxy groups), 4'-methoxyacetophenone (ether, ketone groups), o-nitrophenetole (nitro, ether groups), 2-hexoxyethanol (hydroxy, ether groups), ethylcyanoacetoacetate (cyano, keto, ester groups), p-anisaldehyde (ether, aldehyde groups), polypropylene glycol 1200 (ether, hydroxyl groups), n-butoxy acetate (ether, ester groups), and 2-phenylthioethanol (thioether, hydroxyl groups).

- 37. Noting that the underlined compounds meet the applicant's limitations concerning the glycol ether and the glycol ether acetate.
- 38. Previous rejections based on Dishart et al (US 5,096,501) are withdrawn based on the applicant's amendments to the claims.

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39. Claims 25-29, 33, 37-42, 49-50, 52-54, 57, 60, 62-65, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiino et al (US 5,346,640).

- 40. Shiino is relied upon as presented in the previous action. Although Shiino does not teach the ether acetate, Shiino does teach the use of combinations of glycol ethers as required by most of the applicant's claims.
- 41. Previous rejections based on Kuemin et al are withdrawn based on the applicant's amendments to the claims. Specifically, the applicant's claims now require two specific solvents not taught by Kuemin.
- 42. Claims 25-29, 33, 37-42, 49-50, 52-54, 57, 60, 62-65, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Blatter et al (US 5,753,605).
- 43. Blatter teaches in example 1 (see col. 6) an aqueous composition containing dipropylene glycol monomethyl ether, dipropylene glycol methyl ether, and dipropylene glycol n-propyl ether.

Conclusion

- 44. The applicant is correct that by presenting to the examiner an entirely new set of claims with entirely new sets of limitations in a PCT case cannot be restricted as long as unity of invention is met. The examiner appreciates this strategy. However, by presenting an entirely new set of limitations, the applicant's claims are now open to new references as seen above.
- 45. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 703-305-4945. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Gregory E. Webb Primary Examiner Art Unit 1751

gw